PREPARED FOODS CONTAINING TRIGLYCERIDE-RECRYSTALLIZED NON-ESTERIFIED PHYTOSTEROLS

CROSS-REFERENCE TO RELATED PATENT APPLICATIONS

[0001] This application is a continuation-in-part of PCT Application PCT/US02/36809 and a continuation-in-part of U.S. Application 10/295,929, filed November 14, 2002, now U.S Patent 6,638,547, which claim the benefit of U.S. Provisional application 60/332,434, filed November 16, 2001, each of which is incorporated herein by reference in its entirety, including all figures and tables.

BACKGROUND OF THE INVENTION

[0002] The present invention relates to prepared foods, such as fried snack foods, fortified with non-esterified phytosterols delivered in fats or oils that are essentially free of emulsifiers and the like, and to the utility of such phytosterols for stabilizing heated fats and oils against oxidation, as well as to the surprising bioavailability of triglyceride-recrystallized phytosterols in such foods, for decreasing plasma cholesterol levels in mammals.

[0003] It has been a widely held belief that to obtain appreciable benefit from phytosterols, *i.e.*, either plant sterols, stanols, or combinations thereof [including beta-sitosterol, beta-sitostanol, campesterol, campestanol, stigmasterol, stigmastanol, brassicasterol, brassicastanol, clionasterol and clionastanol (collectively termed phytosterol or phytosterols)] for lowering plasma cholesterol, the phytosterol should be dissolved in an edible oil or other solvent so that it can enter micelles in the small intestine to inhibit the absorption of cholesterol.

[0004] This belief has been supported by early research carried out in the 1950s through the 1970s showing that large doses of phytosterols in their solid form, *i.e.*, coarse powders, were required to achieve meaningful decreases in plasma cholesterol levels. For example, in 1956, Faquhar et al., (Circulation, 14, 77-82, 1956) showed that doses of 12-18g per day